

CLAIMS

What is claimed is:

1. A method of managing communication between a plurality of components of a computer system, comprising the steps of:

registering at least a portion of the plurality of components with an intermediary module, wherein the intermediary module is coupled to each of the components;

providing from a first one of the plurality of components to the intermediary module a request for a data object;

correlating the requested data object with a second one of the components containing the requested data object, wherein the second component is registered;

forwarding the request to the second component; and

fulfilling the request by providing the requested data object to the first component.

2. The method according to claim 1, wherein the computing system comprises a plurality of devices.

3. The method according to claim 1, wherein the plurality of components includes a producer component and a consumer component, the producer component fulfilling at least a portion of requests made by the consumer component.

4. The method according to claim 3, wherein the plurality of components further includes a hybrid component which, under predetermined conditions, acts as a consumer component and which otherwise acts as a producer component.

5. The method according to claim 1, wherein all of the components reside on a single processor.

6. The method according to claim 4, wherein the intermediary module receives a plurality of requests from the consumer component including at least one of a request to retrieve a value in the a data object from the producer component, a request to retrieve a value in a next data object of the producer component, a request to set a value in the data object of the producer component, a request to set a read-only value of the data object of the producer component and a request to store a value of the data object in a nonvolatile memory.

7. The method according to claim 1, wherein the intermediary module performs the correlating step using one of a hash table, a database application and a binary tree.

8. The method according to claim 5, wherein the single processor operates a switching device.

9. The method according to claim 1, further comprising the step of deleting from the register reference to a deleted component which has been decoupled from the intermediary module.

10. An intermediary module for a software package for facilitating communication among a plurality of components of a computing system, comprising:

a register of at least a portion of the components; and

a dispatch component to route a request for a data object received from a first one of the components, the dispatch component correlating the requested data object to a second one of the components containing the requested data object, wherein the second component is included in the register.

11. The intermediary module according to claim 10, wherein the dispatch component communicates with a plurality of manageable entities, each of the manageable entities corresponding to one of the registered components and directing a request for a data object contained within the corresponding registered component to a location of the requested data object within the registered component.

12. The intermediary module according to claim 11, further comprising:

a configuration component containing configuration parameters for the manageable entities; and

a utility for generating the manageable entities using the configuration component.

13. The intermediary module according to claim 10, wherein the register includes control data relating a plurality of data objects with corresponding ones of the plurality of registered components.

14. A system for managing communications among a plurality of components of a computing system comprising:

a consumer component;

a plurality of producer components; and

an intermediary module receiving from the consumer component requests for data objects, wherein, upon receipt of a consumer component request, the intermediary module consults a register to identify a registered one of the producer components in which the data object is contained.

15. The system according to claim 14, wherein the intermediary module communicates with a plurality of manageable entities, each of the manageable entities corresponding to one of the registered components and directing a requests for data object contained within the corresponding registered component to a location of the requested data object within the registered producer component.

16. The system according to claim 14, wherein the system operates a switch.

17. The system according to claim 14, wherein the intermediary module receives a plurality of requests from the consumer component including at least one of a request to

retrieve a value in the a data object from the producer component, a request to retrieve a value in a next data object of the producer component, a request to set a value in the data object of the producer component, a request to set a read-only value of the data object of the producer component and a request to store a value of the data object in a nonvolatile memory.

18. The system according to claim 14, further comprising a hybrid component which, under predetermined conditions, acts as a consumer component and which otherwise acts as a producer component.